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27. The system of claim 24, comprising the further examination of said atypical cells with molecular diagnostic techniques.

REMARKS

Careful consideration has been given the above-identified action, and reconsideration of this application, as amended, is respectfully requested.

The undersigned would like to reply to the objection to the drawings but fails to understand the objection. Figures 1-3 present block diagrams which are, as understood by the undersigned, acceptable to describe computer system operations. To the extent that Figures 1-3 need to be amended, the undersigned respectfully invites the Examiner's telephone interview to further address this issue. Applicant intends to and does want to respond to the objection, but without fully understanding the objection, applicant is unable to do so. For purposes of considering this a reply, applicant traverses the objection to the drawings and respectfully invites the Examiner to further clarify the same with a telephone interview.

Claims 16-23 were rejected over 35 USC 112. The objection to the mere recitation of a computer is traversed. Applicant's patent application specifically recites that it is a CIP of Issued Patent Nos. 6,284,482 and 6,297,044. The disclosures of those applications were fully incorporated by reference and those applications disclosure computer systems which perform the activities identified in

claim 16. Thus, it is believed there is adequate support in the specification for said recitation in claim 16.

With regard to claim 17, it is respectfully suggested that computer assisted analysis is more specific than the broader recitation of computer in paragraph (a) of claim 16 and adds structure.

Claim 19 has been amended. Claim 22 has been cancelled. Claim 21 is dependent upon claim 19 and said light indicator portion of the histogram is part of that which is capable of being produced by the computer system.

Claims 16 through 23 were rejected under 35 USC 102(b) as anticipated by the prior Rutenberg patent 5,740,270.

It is respectfully submitted that claim 16 defines over Rutenberg because the Rutenberg prior art does not show, suggest or disclose conducting DNA ploidy quantization on selected atypical cells but merely generally discloses that other morphological algorithms may be alternatively additionally used to classify based on certain features. Thus, the present invention is directed to first selecting cells for atypicality, and then limiting the DNA ploidy quantization to those cells which are atypical. The two step approach provides enhanced accuracy in selecting precancerous or cancerous cells because of the selection process as specifically stated in the specification on page 5, lines 10-11, "there are no systems which select suspect cells from a population in order to further assess such cells for atypical DNA ploidy." It is believed that is a correct statement, and the prior art

Rutenberg patent does not meet that statement and that the present invention is patentable over the prior art.

Claim 24 is dependent upon claim 16 and recites that the cell population is retrieved from epithelial tissue and that a brush removes cells from at least two layers of epithelial tissue. That detail is neither shown nor suggested in the prior art reference.

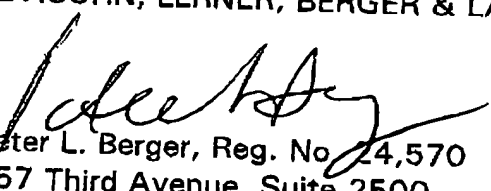
Claims 25 through 27 are taken from claims 17, 18 and 23 and are dependent upon claim 24.

A request for a two month extension of time is submitted herewith and the Commissioner is authorized to charge our deposit account number 02-2105 for the extension fee and any other fee which may be due in connection therewith.

In view of the above action and comments, and further in view of the invitation to telephone the undersigned to clarify outstanding questions relating to the drawings, it is hoped an early notice of allowance will soon follow.

Respectfully submitted,

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AMENDED CLAIM MARKED UP TO SHOW ALL THE CHANGES

16. (Amended) A system to detect cancerous and precancerous cells in a cell population comprising:

(a) a computer to morphologically analyze individual cells for atypicality;

(b) said computer cytometrically analyzing said individual cells for atypicality; and

(c) selecting atypical cells from said individual cells exhibiting atypical cytometry and morphology, further comprising means [in order] to conduct DNA ploidy quantization of said atypical cells.

19. (Amended) The system of claim 18, wherein said computer plots a histogram [is plotted] based on the DNA ploidy of said cell population.

23. (Amended) The system of claim 16, comprising the further examination [distinction] of said atypical cells with molecular diagnostic techniques.